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09/872,552	05/31/2001	Ching-Lan Ho	OR01-04201	2250

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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER
LE, MIRANDA

ART UNIT	PAPER NUMBER
2177	6

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _17 November 2003_.

2a) ☒ This action is **FINAL**.　　　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-3,5-12,14-21 and 23-27_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-3,5-12,14-21 and 23-27_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

　　a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   This communication is responsive to Amendment A, filed 11/17/2003.

2.   Claims 1-3, 5-12, 14-21, 23-27 are pending in this application. Claims 1, 10, 19 are

independent claims. In the Amendment A, claims 4, 13, 22 have been cancelled, and claims 1, 6,

10, 15, 19, 24 have been amended. This action is made Final.

Claim Objections

3.   Claims 6, 15, 24 are objected to because of the following informalities: "hexidecimal"

should be changed to "hexadecimal". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-2, 7-11, 16-20, 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated

by Kennedy et al. (US Patent No. 5,675,818).

Kennedy anticipated independent claims 1, 13, 15 by the following:

As to claims 1, 10, 19, Kennedy teaches "a method for facilitating use of a collation

element that supports a large number of characters, comprising: receiving the collation element"

col. 7, line 47 to col. 8, line 52;

"reading a primary weight value from a primary weight field within the collation element" at col. 8, line 53 to col. 9, line 12;

"if the primary weight value falls within a reserved set of values, reading an additional portion of the primary weight value from a secondary weight field and a tertiary weight field within the collation element" at col. 9, line 14 to col. 10, line 10;

"if the primary weight value is not within the reserved set of values, reading a secondary weight value from the secondary weight field within the collation element" at col. 7, line 47 to col. 8, line 67, col. 9, lines 1-12;

" reading a tertiary weight value from the tertiary weight field within the collation element" at col. 7, line 47 to col. 8, line 52,

"the primary weight value identifies a character" at col. 7, line 47 to col. 8, line 52;

"wherein the secondary weight value can specify an accent on the character" at col. 7, line 47 to col. 8, line 14;

"wherein the tertiary weight value can specify case information for the character" at col. 7, line 47 to col. 8, line 30.

As to claims 2, 11, 20, Kennedy teaches "if the primary weight value falls within a reserved set of values, the method additionally comprises: setting the secondary weight value to a secondary default value" at col. 8, line 54 to col. 9, line 11, Fig. 2C;

"setting the tertiary weight value to a tertiary default value" at col. 8, line 54 to col. 9, line 11, Fig. 2C.

As to claims 7, 16, 25, Kennedy teaches "the collation element is taken from a collation

weight table that is used to map characters to collation weights in order to establish an ordering

between strings of characters" at col. 14, lines 1-62.

As to claims 8, 17, 26, Kennedy teaches "constructing a sorting key for a string by:

reading each character in the string" at col. 14, lines 1-62;

"looking up a corresponding collation element for each character from the collation

weight table" at col. 7, line 6 to col. 8, line 52;

"adding the corresponding collation element for each character to the sorting key" at col.

7, line 6 to col. 8, line 52.

As to claims 9, 18, 27, Kennedy teaches "wherein the sorting key is associated with a

record within a database" at col. 7, line 6 to col. 8, line 52, Fig. 1C;

"wherein the sorting key is used to construct a linguistic index for the database" at col.

13, lines 11-46, col. 7, lines 6-45.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the invention was
> made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.   Claims 3, 5-6, 12, 14-15, 21, 23-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kennedy et al. (US Patent No. 5,675,818), in view of Davis et al. ("Unicode

Technical Standard #10, Unicode Collation Algorithm").

As to claims 3, 12, 21, Kennedy does not specifically teach "the collation element

adheres to a structure specified in Unicode Technical Report No. 10". However, Davis teaches

this limitation on page 33, ¶ 6.11.1.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the teachings of Kennedy with the teachings of Davis to include "the

collation element adheres to a structure specified in Unicode Technical Report No. 10" in order

to provide a complete resolution of the handling of canonical and compatibility equivalences as

relates to the default ordering.

As to claims 5, 14, 23, Kennedy does not expressly teach "the collation element is four

bytes in size, of which the primary weight field is two bytes, the secondary weight field is one

byte and the tertiary weight field is one byte, unless a value in the primary weight field belongs

to the reserved set of values, in which case the primary weight field takes up all four bytes of the

collation element". However, Davis teaches this limitation on page 33, ¶ 6.11.1.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Kennedy with the teachings of Davis to include "the collation element is four bytes in size, of which the primary weight field is two bytes, the secondary weight field is one byte and the tertiary weight field is one byte, unless a value in the primary weight field belongs to the reserved set of values, in which case the primary weight field takes up all four bytes of the collation element" in order to allow implementations to produce culturally acceptable collation, while putting the least burden on implementations in terms of memory requirements and performance.

As to claims 6, 15, 24, Kennedy does not explicitly teach "the reserved set of values for the primary weight value includes hexadecimal values OxFFFO-OxFFFF". However, Davis teaches this limitation on page 33, ¶ 6.11.1.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Kennedy with the teachings of Davis to include "the reserved set of values for the primary weight value includes hexadecimal values OxFFFO-OxFFFF" in order to provide a Database Management System having a Collation Engine with improved methods for collating information with internationalization support, in which the Collation Engine includes an improved method for comparing text strings with a culturally-predictable result.

Response to Arguments

8.   Applicant's arguments filed 11/17/2003 have been fully considered but they are not

persuasive.

Applicant argues that Kennedy's reference does not teach/suggest using additional space

in the collating element for either (1) accent and case information, or (2) to accommodate a large

number of characters. The Examiner respectfully disagrees.

Applicant's arguments seem to be suggesting that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,

additional space in the collating element) are not recited in the rejected claim(s). Although the

claims are interpreted in light of the specification, limitations from the specification are not read

into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, the Examiner has thoroughly reviewed Applicants' arguments but firmly

believes that the cited reference reasonably and properly meets the claimed limitation.

Applicants are reminded that the Examiner is entitle to give the broadest reasonable

interpretation to the language of the claimed as discussed in the Office Action. The Examiner is

not limited to Applicants' definition which is not specifically set forth in the claims. In re

Tanaka et al., 193 USPQ 139, (CCPA) 1977.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Miranda Le
January 26, 2004

GRETA ROBINSON
PRIMARY EXAMINER 2\3\04